Sewage Sludge (Biosolids) Annual Report

EPA Regulations – 503.18, 503.28, 503.48

INSTRUCTIONS

EPA's sewage sludge regulations (40 CFR part 503) require certain POTWs and Class I sewage sludge management facilities to submit to an annual biosolids report. POTWs that must submit an annual report include POTWs with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more. This is the biosolids annual report form for POTWs and Class I sewage sludge management facilities in the 42 states and all tribes and territories where EPA administers the Federal biosolids program.

For the purposes of this form, the term 'sewage sludge' also refers to the material that is commonly referred to as 'biosolids.' EPA does not have a regulatory definition for biosolids but this material is commonly referred to as sewage sludge that is placed on, or applied to the land to use the beneficial properties of the material as a soil amendment, conditioner, or fertilizer. EPA's use of the term 'biosolids' in this form is to confirm that information about beneficially used sewage sludge (a.k.a. biosolids) should be reported on this form.

Please note that questions with a (*) are required. Please also note that EPA may contact you after you submit this report for more information regarding your sewage sludge program.

Questions regarding this form should be directed to the NPDES Electronic Reporting Helpdesk at:

- NPDESeReporting@epa.gov OR
- 1-877-227-8965

What action would you like to take? *

New Biosolids Program Report

1. Program Information

Please select the NPDES ID number below for this Sewage Sludge (Biosolids) Annual Report. *

WAL023744: BELLINGHAM STP

IMPORTANT - If you do not see the NPDES ID associated with your facility (i.e., you only see a blue bar in the above drop down list), you MUST follow the instructions in the "Biosolids User's Guide." A shorter set of instructions to fix this issue are in the "Important Instructions on Accessing Your NPDES ID" document. Both documents are located at: https://epanet.zendesk.com/hc/en-us/sections/207108787-General-Biosolids.

Facility Name: BELLINGHAM STP

Street: 2221 Pacific St

City: Bellingham

State: WA

Zip Code: 98229-5823

1.1 Please select at least one of the following options pertaining to your obligation to submit a Sewage Sludge (Biosolids) Annual Report in compliance with 40 CFR 503. The facility is: *

- ☒ a POTW with a design flow rate equal to or greater than one million gallons per day
- ☒ a POTW that serves 10,000 people or more
- ☒ a Class I Sludge Management Facility as defined in 40 CFR 503.9
- ☐ otherwise required to report (e.g., permit condition, enforcement action)
- ☐ none of the above

1.2 Reporting Period Start and End Dates

Start Date of Reporting Period *	End Date of Reporting Period *
01-01-2017	12-31-2017

2. Facility Information

2.1 Biosolids or Sewage Sludge Treatment Processes

Please check the box next to the following biosolids or sewage sludge treatment processes that you used on the sewage sludge or biosolids generated or produced at your facility during the reporting period (check one or more that apply). *

Pathogen Reduction Operations (see Appendix B to Part 503)

Processes to Significantly Reduce Pathogens (PSRP)

- ☐ Aerobic Digestion
- ☐ Air Drying (or "sludge drying beds")
- ☐ Anaerobic Digestion
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization

Processes to Further Reduce Pathogens (PFRP)

- ☐ Higher Temperature Composting
- ☐ Heat Drying (e.g., flash dryer, spray dryer, rotary dryer)
- ☐ Heat Treatment (Liquid sewage sludge is heated to temp. of 356°F (or 180°C) or higher for 30 min.)
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization

Physical Treatment Operations

- ☐ Preliminary Operations (e.g., sludge grinding, degritting, blending)
- ☒ Thickening (e.g., gravity and/or flotation thickening, centrifugation, belt filter press, vacuum filter)
- ☐ Sludge Lagoon

Other Processes to Manage Sewage Sludge

- ☐ Temporary Sludge Storage (sewage sludge stored on land 2 years or less, not in sewage sludge unit)
- ☐ Long-term Sludge Storage (sewage sludge stored on land 2 years or more, not in sewage sludge unit)
- ☐ Methane or Biogas Capture and Recovery
- ☒ Other Treatment Process: Incineration - multiple hearth sewage sludge incineration.

2.2 Biosolids or Sewage Sludge Analytical Methods

EPA regulations specify that representative samples of sewage sludge that is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator must be collected and analyzed. These regulations also specify the analytical methods that must be used to analyze samples of sewage sludge. For example, EPA requires facilities to monitor for the certain parameters, which are listed in Tables 1, 2, 3, and 4 at 40 CFR 503.13 and Tables 1 and 2 40 CFR 503.23. See also 40 CFR 503.8.

Please check the box next to the following analytic methods used on the sewage sludge or biosolids generated or produced by you or your facility during the reporting period (check one or more that apply). *

Parameter	Method Number or Author	Description Text for Certification Section
Pathogens		
Ascaris ova.	☐ Sludge Monitoring - Ascaris ova. ☐ Other Ascaris ova. Analytical Method:	Sludge Monitoring - Ascaris ova., "Test Method for Detecting, Enumerating, and Determining the Viability Ascaris in Sludge (Appendix I)," Control of Pathogens and Vector Attraction in Sewage Sludge", EPA-625-R-92-013, July 2003

Parameter	Method Number or Author	Description Text for Certification Section
Enteric viruses	☐ ASTM Method D4994 - Enteric Viruses	ASTM Method D4994 - Enteric Viruses, "Standard Practice for Recovery of Viruses From Wastewater Sludges," ASTM International
	☐ Other Enteric Viruses Analytical Method:	
Fecal coliform	☐ Standard Method 9222 - Fecal Coliform	Standard Method 9222 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association [Note: This method is only allowable for Class B sewage sludge]
	☐ Standard Method 9221 - Fecal Coliform	Standard Method 9221 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ EPA Method 1680 - Fecal Coliform	EPA Method 1680 - Fecal Coliform, "Fecal Coliforms in Sewage Sludge by Multiple-Tube Fermentation using Lauryl Tryptose Broth and EC Medium," EPA-821-R-10-003, April 2010
	☐ EPA Method 1681 - Fecal Coliform	EPA Method 1681 - Fecal Coliform, Fecal Coliforms in Sewage Sludge (Biosolids) by MultipleTube Fermentation using A-1 medium, EPA-821-R-04-027, June 2005
	☐ Other Fecal Coliform Analytical Method:	
Helminth ova.	☐ W.A. Yanko Method - Helminth ova.	W.A. Yanko Method - Helminth Ova., "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges," EPA-600-1-87-014, 1987
	☐ Other Helminth ova. Analytical Method:	
Salmonella sp. Bacteria	☐ Standard Method 9260 - Salmonella	Standard Method 9260 - Salmonella, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ EPA Method 1682 - Salmonella	EPA Method 1682, "Salmonella in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium," EPA-821-R-06-014, July 2006
	☐ Kenner and Clark Method - Salmonella	Kenner and Clark Method - Salmonella, “Detection and Enumeration of Salmonella and Pseudomonas aeruginosa,” J. Water Pollution Control Federation, 46(9):2163-2171, 1974
	☐ Other Salmonella sp. Bacteria Analytical Method:	
Total Culturable Viruses	☐ Class A Sludge Monitoring - Total Culturable Viruses	EPA Class A Sludge Monitoring - Total Culturable Viruses, "Method for the Recovery and Assay of Total Culturable Viruses from Sludge (Appendix H)," Control of Pathogens and Vector Attraction in Sewage Sludge, EPA-625-R-92-013, July 2003
	☐ Other Total Culturable Viruses Analytical Method:	
Metals		
Arsenic	☒ EPA Method 6010 - Arsenic (ICP-OES)	EPA Method 6010 - Arsenic (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Arsenic (ICP-MS)	EPA Method 6020 - Arsenic (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Arsenic (GF-AAS)	EPA Method 7010 - Arsenic (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7061 - Arsenic (AA-GH)	EPA Method 7061 - Arsenic (Atomic Absorption - Gaseous Hydride), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Arsenic Analytical Method:	
Beryllium	☒ EPA Method 6010 - Beryllium (ICP-OES)	EPA Method 6010 - Beryllium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Beryllium (ICP-MS)	EPA Method 6020 - Beryllium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Beryllium (FAAS)	EPA Method 7000 - Beryllium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Beryllium (GF-AAS)	EPA Method 7010 - Beryllium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Beryllium Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Cadmium	☒ EPA Method 6010 - Cadmium (ICP-OES)	EPA Method 6010 - Cadmium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Cadmium (ICP-MS)	EPA Method 6020 - Cadmium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Cadmium (FAAS)	EPA Method 7000 - Cadmium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Cadmium (GF-AAS)	EPA Method 7010 - Cadmium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7131 - Cadmium (GF-AAS)	EPA Method 7131 - Cadmium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Cadmium Analytical Method:	
Chromium	☒ EPA Method 6010 - Chromium (ICP-OES)	EPA Method 6010 - Chromium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Chromium (ICP-MS)	EPA Method 6020 - Chromium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Chromium (FAAS)	EPA Method 7000 - Chromium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Chromium (GF-AAS)	EPA Method 7010 - Chromium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7191 - Chromium (AA-FT)	EPA Method 7191 - Chromium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Chromium Analytical Method:	
Copper	☒ EPA Method 6010 - Copper (ICP-OES)	EPA Method 6010 - Copper (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Copper (ICP-MS)	EPA Method 6020 - Copper (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Copper (FAAS)	EPA Method 7000 - Copper (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Copper (GF-AAS)	EPA Method 7010 - Copper (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Copper Analytical Method:	
Lead	☒ EPA Method 6010 - Lead (ICP-OES)	EPA Method 6010 - Lead (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Lead (ICP-MS)	EPA Method 6020 - Lead (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Lead (FAAS)	EPA Method 7000 - Lead (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Lead (GF-AAS)	EPA Method 7010 - Lead (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7421 - Lead (AA-FT)	EPA Method 7421 - Lead (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Lead Analytical Method:	
Mercury	☒ EPA Method 7471 - Mercury (CVAA)	EPA Method 7471 - Mercury in Solid or Semi-Solid Waste (Cold Vapor Atomic Absoprtion), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Mercury Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Molybdenum	☐ EPA Method 6010 - Molybdenum (ICP-OES)	EPA Method 6010 - Molybdenum (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Molybdenum (ICP-MS)	EPA Method 6020 - Molybdenum (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Molybdenum (FAAS)	EPA Method 7000 - Molybdenum (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Molybdenum (GF-AAS)	EPA Method 7010 - Molybdenum (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7481 - Molybdenum (AA-FT)	EPA Method 7481 - Molybdenum (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Molybdenum Analytical Method:	
Nickel	☒ EPA Method 6010 - Nickel (ICP-OES)	EPA Method 6010 - Nickel (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Nickel (ICP-MS)	EPA Method 6020 - Nickel (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Nickel (FAAS)	EPA Method 7000 - Nickel (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Nickel (GF-AAS)	EPA Method 7010 - Nickel (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Nickel Analytical Method:	
Selenium	☐ EPA Method 6010 - Selenium (ICP-OES)	EPA Method 6010 - Selenium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Selenium (ICP-MS)	EPA Method 6020 - Selenium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Selenium (GF-AAS)	EPA Method 7010 - Selenium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7740 - Selenium (AA-FT)	EPA Method 7741A - Selenium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7741 - Selenium (AA-GH)	EPA Method 7741 - Selenium (Atomic Absorption - Gaseous Hydride), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Selenium Analytical Method:	
Zinc	☒ EPA Method 6010 - Zinc (ICP-OES)	EPA Method 6010 - Zinc (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Zinc (ICP-MS)	EPA Method 6020 - Zinc (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Zinc (FAAS)	EPA Method 7000 - Zinc (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Zinc (GF-AAS)	EPA Method 7010 - Zinc (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Zinc Analytical Method:	

Nitrogen Compounds

Ammonia Nitrogen	☐ EPA Method 350.1 - Ammonia Nitrogen	EPA Method 350.1 - Ammonia Nitrogen, "Determination of Ammonia Nitrogen by Semi-Automated Colorimetry," August 1993
	☐ Standard Method 4500-NH3 - Ammonia Nitrogen	Standard Method 4500-NH3 - Ammonia Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Ammonia Nitrogen Analytical Method	
Nitrate Nitrogen	☐ EPA Method 9056 - Nitrate Nitrogen (IC)	EPA Method 9056 - Nitrate Nitrogen (Ion Chromatography), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 9210 - Nitrate Nitrogen (ISE)	EPA Method 9210 - Nitrate Nitrogen (Ion-Selective Electrode), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Nitrate Nitrogen Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Nitrogen	☐ Standard Method 4500-N - Nitrogen	Standard Method 4500-N - Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Nitrogen Analytical Method:	
Organic Nitrogen	☐ Standard Method 4500-Norg - Organic Nitrogen	Standard Method 4500-Norg - Organic Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Organic Nitrogen Analytical Method:	
Total Kjeldahl Nitrogen	☐ EPA Method 351.2 - Total Kjeldahl Nitrogen	EPA Method 351.2 - Total Kjeldahl Nitrogen, "Determination of Total Kjeldahl Nitrogen by Semi-Automated Colorimetry," August 1993
	☐ Other Total Kjeldahl Nitrogen Analytical Method:	

Other Analytes

Fixed Solids	☐ Standard Method 2540 - Fixed Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Fixed Solids Analytical Method:	
Paint Filter Test	☐ EPA Method 9095 - Paint Filter Liquids Test	EPA Method 9095 - Paint Filter Liquids Test, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Paint Filter Test Analytical Method:	
pH	☐ EPA Method 9040 - pH (≤ 7% solids)	EPA Method 9040 - pH (≤ 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 9045 - pH (> 7% solids)	EPA Method 9045 - pH (> 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other pH Analytical Method:	
Specific Oxygen Uptake Rate	☐ Standard Method 2710 - SOUR	Standard Method 2710 - Specific Oxygen Uptake Rate, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Specific Oxygen Uptake Rate Analytical Method:	
TCLP	☐ EPA Method 1311 - Toxicity Characteristic Leaching Procedure	EPA Method 1311 - Toxicity Characteristic Leaching Procedure, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other TCLP Analytical Method:	
Temperature	☐ Standard Method 2550 - Temperature	Standard Method 2550 - Temperature, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Temperature Analytical Method:	
Total Solids	☒ Standard Method 2540 - Total Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Total Solids Analytical Method:	
Volatile Solids	☒ Standard Method 2540 - Volatile Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Volatile Solids Analytical Method:	
No Analytical Methods	☐ No Analytical Methods Used	

2.3 What is the estimated total volume of biosolids or sewage sludge produced at your facility for the reporting period (in dry metric tons)? *

3703.5

3. Biosolids or Sewage Sludge Management

EPA NPDES regulations at 40 CFR 503 only require reporting for land application, surface disposal, or incineration. You have the option to select "Other Management Practice" if you wish to provide more information on how you manage your sewage sludge or biosolids.

Please use the selections below to identify how sewage sludge or biosolids generated or produced at your facility was managed, used, or disposed by you or your facility for the reporting period. You can use the button below to add as many Sewage Sludge Unique Identifier (SSUID) sections as needed to describe how you manage your sewage sludge.

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 001

Management Practice Type *	Handler, Preparer, or Applier Type *
Incineration	On-Site Owner or Operator

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. "Off-Site Third-Party Handler or Applier" refers to third parties which do not change the quality of the Biosolids. "Off-Site Third-Party Preparer" refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Volume Amount (dry metric tons) *
Not Applicable	3703.5

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Incineration

- ☐ Facility failed to comply with emissions limits as specified in the NPDES permit or 40 CFR 503.43.
- ☐ Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).
- ☐ Facility failed to comply with the National Emission Standards for Beryllium in Subpart C of 40 CFR Part 61.
- ☐ Facility failed to comply with the National Emission Standards for Mercury in Subpart E of 40 CFR Part 61.
- ☐ Facility failed to operate, maintain, and calibrate the instruments that continuously measure and record THC (or alternatively CO), oxygen concentration, moisture content, and combustion temperatures (see 40 CFR 503.45).
- ☐ Facility incinerator failed to operate within the required range of the air pollution control devices operating parameters as specified in the permit.
- ☐ Incineration of sewage sludge likely adversely affected a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.45(g)).
- ☐ Facility did not comply with one or more of the applicable incineration requirements (see 40 CFR 503.45(a) through (f) and (h)).

☒ **Please select this checkbox to continue completing the form.**
If you wish to change the SSUID section(s) above, uncheck this box. *

4. Incineration

Please complete the following tables for the on-site sewage sludge incineration conducted by you or your facility. Please use the instructions in the "Biosolids User's Guide" to complete this section. See: https://epanet.zendesk.com/hc/en-us/sections/207108787-General-Biosolids.

Pollutant	Concentration For Beryllium and Mercury: Maximum Concentration in Stack Gas of Incinerator For all others: Average Daily Concentration in Sewage Sludge Fed to Incinerator	Calculated Limit	Parameter Units
Arsenic	3.0	1425	mg/kg db
Beryllium	0	58	ug/m3
Cadmium	1.3	4439	mg/kg db
Chromium	20	4552	mg/kg db
Lead	18	45461	mg/kg db
Mercury	31	18521	ug/dscm @ 7%
Nickel	14.3	144470	mg/kg db

Please Report One Parameter

Monthly Average Concentration (Parts Per Million on Volumetric Basis)

	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total Hydrocarbon Concentration in Exit Gas	3.5	3.6	4.8	5.1	11.4	16.6	11.7	7.6	9.4	8.7	12.8	17.7
Carbon Monoxide Concentration in Exit Gas (per 40 CFR 503.40(c)(1))												

	Miminium	Maximum	Parameter Units
Operating Combustion Temperature	1501	1733	F
Moisture Content in Exit Gas	1.4	2.4	%
Oxygen Concentration	11.0	14.7	%

Additional Information

Please enter any additional information in the comment box below (limit to 3,900 characters) that you would like to provide.

Hg measured in stack #1 gas at 0.031 mg/dscm @ 7% O2 (and at 0.022 mg/dscm @ 7% O2 in stack #2) during 2017 40 CFR 62 LLL testing. Beryllium < DL (<0.053 ug/m3) in New Source Performance Testing.
Note: No guidance found for the specific reporting parameters: Moisture or O2. Used 40 CFR 62 LLL data for moisture and O2, Bellingham also provided 2017 incinerator daily averages to USEPA's Region 7 Biosolids Center in report mailed 1/15/18.

Additional Attachments (maximum size 25 MB)

File: BellinghamIncinAves2017.zip

Certification Information

I certify, under penalty of law, that the information in this report was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Certifier E-Mail *	Form Action *
klowry@cob.org	Approve